

Bandpass Filter

Features

- High power handling
- Small size
- Temperature stable
- Excellent rejection

Applications

- Military radio
- PCS
- Satellite
- UMTS
- WiFi
- Lab use

HT-SYBP-2250+



50Ω 1880 to 2620 MHz

Electrical Specifications at 25°C

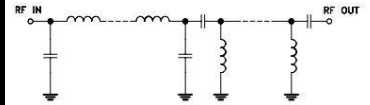
Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	1420	-	MHz
	Insertion Loss	F1-F2	1250-1560	-	2.2	2.9	dB
	VSWR	F1-F2	1250-1560	-	1.7	2.2	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC-880	30	39	-	dB
		F3-F4	880-1030	20	26	-	dB
		DC-F4	DC-1030	-	29	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	2900-4000	20	28	-	dB
		F6-F7	4000-4600	-	20	-	dB
		F5-F7	2900-4600	-	23	-	:1

Typical Performance Data

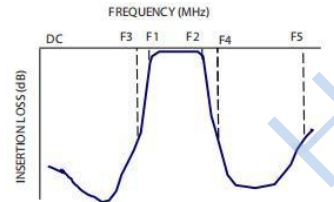
(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	75.60	9598.53
600	42.56	24.93
1000	36.86	19.31
1100	36.69	18.57
1280	25.98	14.78
1380	16.27	10.40
1500	6.63	4.40
1880	1.36	1.33
2000	1.24	1.24
2400	1.46	1.41
2620	1.79	1.53
3000	5.96	5.98
3640	29.39	11.65
4280	29.65	10.55
5400	23.11	15.53

Functional Schematic



Typical Frequency Response



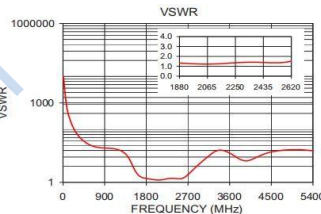
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

*Passband rating, derate linearly to 3W at 85°C ambient
Permanent damage may occur if any of these limits are exceeded.

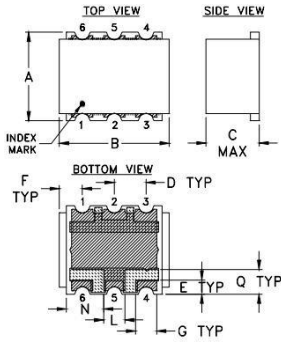
Pin Connections

RF IN	4
RF OUT	6
GROUND	1,2,3,5

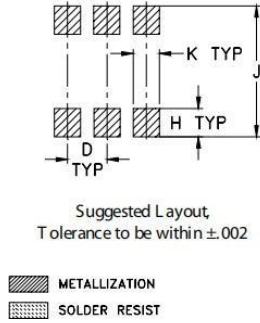


Bandpass Filter

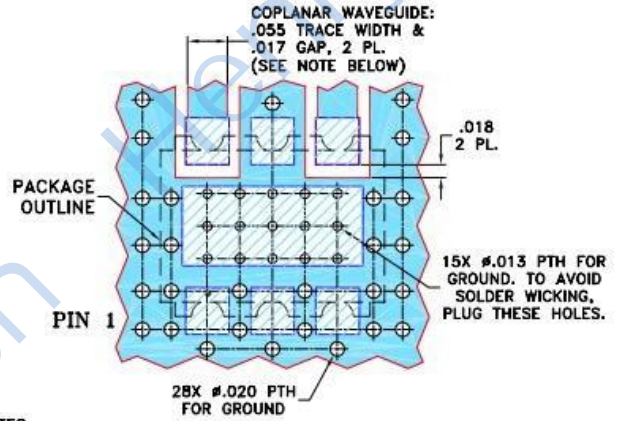
Outline Drawing



PC B L and Patter n





Demo Board MCL P/N: TB-517+
Suggested PCB Layout (PL-308)



Outline Dimensions: Unit (mm)					
A	6.35	B	7.87	C	3.81
D	2.29	E	1.02	F	1.65
G	1.52	H	1.65	J	7.62
K	1.52	L	1.52	N	2.67
Q	1.78	wt			0.50

NOTES:

- COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS R04350B WITH THICKNESS $.030" \pm .002"$; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
- BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
 -  DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 -  DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK